

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE: PRESENTS SHAVE COME:

Monsanto Jechnology TIG

MICCOLS, THERE HAS BEEN PRESENTED TO THE

## Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY THARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLEMISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE SURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT AND THE PLANT VARIETY PROTECTION ACT. (84 STAT., 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'I062687'

In Testimonn Thereof, I have hereunto set my hand and caused the seal of the Plant Bariety Frotection Office to be affixed at the City of Washington, D.C. this twenty-fifth day of November, in the year two thousand and eight.

Colmand T. Schaffer

tary of Agriculture

Ol-3

Commissioner Plant Varioty Protection Office Agricultural Marketing Service

REPRODUCE LOCALLY. Include form number and date on all reproductions Form Approved - OMB No. 0581-0055 U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995. SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426). APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse 1. NAME OF OWNER 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME 3. VARIETY NAME Monsanto Technology Ł.L.G. ムムC 1062687 None 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 5. TELEPHONE (include area code) FOR OFFICIAL USE ONLY PVPO NUMBER (815) 758-9281 800 N. Lindbergh Blvd. Creve Coeur, MO 63167 6. FAX (include area code) (815) 758-3117 7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF 8. IF INCORPORATED, GIVE STATE OF INCORPORATION 9. DATE OF INCORPORATION March 1, 2006 ORGANIZATION (corporation, partnership, association, etc.) August 27, 1999 Corporation Delaware 10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) FILING AND EXAMINATION FEES: \$ 4382.00 Timothy R. Kain Michael J. Roth 8350 Minnegan Road 800 N. Lindbergh Blvd. : 768.00 Waterman, IL 60556 Creve Coeur, MO 63167 DATE 10/29/08 U.S.A. U.S.A. 11. TELEPHONE (Include area code) 12. FAX (Include area code) 14. CROP KIND (Common Name 13. E-MAIL (815) 758-9281 (815) 758-3117 trkain@monsanto.com Corn, Field 15. GENUS AND SPECIES NAME OF CROP 16. FAMILY NAME (Bolanical) 17. IS THE VARIETY A FIRST GENERATION Zea mays Graminae ☐ YES 18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED 19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF (Follow instructions on reverse) See Section 83(a) of the Plant Variety Protection Act) 'X NO (If "no", go to item 22) a. X Exhibit A. Origin and Breeding History of the Variety YES (If "ves", answer items 20 and 21 below) X Exhibit B. Statement of Distinctness 20. DOES THE OWNER SPECIFY THAT SEED OF THIS YES П ио VARIETY BE LIMITED AS TO NUMBER OF CLASSES? X Exhibit C. Objective Description of Variety Exhibit D. Additional Description of the Variety (Optional) IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED X Exhibit E. Statement of the Basis of the Owner's Ownership 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS: Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public IF YES, SPECIFY THE NUMBER 1.2.3, etc. FOR EACH CLASS. ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED g. X Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office) (If additional explanation is necessary, please use the space indicated on the reverse.) 22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. 23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? OTHER COUNTRIES? X YES □ NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR REFERENCE NUMBER. (Please use space indicated on reverse.) USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties

SIGNATURE OF OWNER TIME A	2 K.	SIGNATURE OF OWNER		
NAME (Please point or type) Timothy R. Kain		NAME (Please print or type)		
CAPACITY OR TITLE Patent Scientist	DATE 2/27/06	CAPACITY OR TITLE	DATE	

#### INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

> **Plant Variety Protection Office** Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

#### ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
  - (1) identify these varieties and state all differences objectively;
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- . 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Parent of a hybrid sold in the U.S. - April 2005

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

U.S. Patent Application No. 11/089,516 - filed March 24, 2005 (1062687)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/isg/seed.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

ST-470 (02-10-2003) designed by the Plant Veriety Protection Office with Word 2000. Replaces former versions of ST-470, which are obsolete.

#### **EXHIBIT A**

#### Origin and Breeding History I062687

1062687 was selected for high yield, low harvest moisture with improved roots and test weight.

Summ	ner 1996	The cross between and	01HGI2 and LIZL1*	(both proprietary DEKALB
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Corporation Inbreds) was made in Thomasboro between rows 403-24 and 404-

25.

Winter 1996/97 The F1 was grown and self-pollinated in Florida row 04-519

Summer 1997 The F2 was self pollinated as Dev-39 in 18 rows 97MR123:7-24.

Fifty ears were saved.

Winter 1997/98 The F3 was self pollinated in row MX-O29-320220.

Four ears were selected.

Summer 1998 The F4 was self pollinated in Row MR263:59. One ear was selected.

Winter 1998/99 The F5 was self-pollinated in Kihei row KH6PSS 27:33.

Three ears were selected.

Summer 1999 The F6 was self pollinated in row 99SN1 250:48.

Three ears were selected.

Winter 1999/2000 The F7 was self pollinated in row PRSS1-4158. Three ears were selected.

Summer 2000 The F8 was grown row in rows SEG1 403:50. Three ears from this row were

bulked and coded 1062687.

Winter 2000/01 The F9 bulk was increased in 5 rows K2LS 11:27-31.

Twenty ears were selected.

Summer 2001 The F10 ears were grown out ear to row and increased by self pollination in rows

218:25 -219:.

#### Statement of Stability and Uniformity

Corn inbred I062687 was coded in 2000 with final selection made in 2001. This inbred has been reproduced by self pollination for two generations and judged to be stable. Inbred I062687 is uniform for all traits observed.

#### Statement of Variants

Corn Inbred I062687 shows no variants other than what would normally be expected due to environment or that would occur for almost any character during the course of repeated sexual reproduction.

<sup>\* -</sup> LIZL1 is derived from lines MM402A (PVP No. 9100222) and MM501D (PVP No. 9300085)

#### **EXHIBIT B**

### Statement of Distinctness

LLC

Monsanto Technology <del>L.L.C.</del> believes that I062687 is most similar to corn inbred 01HGI2, an inbred developed by DEKALB Genetics Corporation.

1062687 and 01HGI2 differ most significantly in the following traits:

Trait	1062687	01HGI2
Glume Color	Pale Purple (5 RP 5/6)	Green (5 GY 4/8)
Silk Color	Green-Yellow (2.5 GY 8/6)	Pink (2.5 R 7/6)

#### 2002

2002	
Variety	Tassel Length (cm)
1062687	35.0
	(Std Dev = 3.1, N= 10)
01HGI2	39.1
	(Std Dev = 2.4, N= 10)
P_Val	0.000
Signif.	**

### 2003

Variety	Tassel Length (cm)			
1062687	32.8			
	(Std Dev = 3.1, N=10)			
01HGI2	41.6			
	Std Dev = 1.2 , N=10)			
P_Val	0.000			
Signif.	**			

Significance levels are indicated as: + = 10%, \* = 5 %, \*\* = 1%

Corn variety I062687 has pale purple glume color, green-yellow silk color and a shorter tassel length while comparative corn variety 01HGl2 has green glume color, pink silk color and a longer tassel length.

## EXHIBIT B (revised)

### **Description of Experimental Design**

The corn varieties I062687, 01HGI2 and MO17 were grown at the Waterman, IL observation nursery in years 2002-2003. The varieties were planted in 2 row plots with 15 plants per row in each of the three years. Trait data were collected on 10 random representative plants for most traits from each 2 row plot. Data on qualitative traits are usually collected on 10 plants from each 2 row plot. For Exhibit C all data were pooled and reported as means across the years for subject variety and the standard variety with standard deviation. The varieties are randomly planted in a 4.5 acre observation nursery which is located within a larger 18 acre field. Besides the observation nursery, this field consists of a research seed increase nursery and an IP seed inventory nursery. The location of each of these individual nurseries is rotated each year to a different location within the 18 acre field. Therefore subject inbreds are not planted adjacent to comparative or standard varieties and may be located in different areas of the larger field each year, therefore being influenced by spacial differences within the field. Growing conditions within the field are not uniform as there are some slight topographical variations such as lower areas which may accumulate and retain water or higher areas which are usually drier. The field is tiled and therefore a variety maybe planted close to a tile line while a comparative variety maybe planted further away and in a low spot within the field. Temporal varieties can exist as weather conditions from year to year can vary as well as planting dates can vary from year to year based on weather conditions. Weather conditions each year can vary the maturity rate of the varieties due to either favorable or unfavorable growing conditions.

Trait variability is not observed for each variety within its own test plot-plants are usually uniform and data are collected on the "most" representative plants- variability occurs due to spacial location of the test plot for that variety from year to year and to the temporal variation of weather conditions from year to year during the 2-3 years data are collected.

#### Waterman Research Station Weather Data 2002-2003

Date	Average	Ave. Monthly	Ave. Monthly	Ave. Monthly	Ave. Monthly
	Precip.	Temp – Max.	Temp-Min	Rel. Humid	Rel. Humid –
	(mm)	(F°)	(F°)	Max (%)	Min (%)
June 2002	5.3	81.3	60.4	90.7	47.7
July 2002	1.5	87.0	64.9	93.2	48.3
August 2002	5.7	83.1	61.0	96.0	51.8
Sept. 2002	1.5	79.4	52.6	95.0	42.7
June 2003	2.0	75.7	55.7	-	_
July 2003	6.4	82.2	62.2	-	_
August 2003	2.6	83.5	63.5	-	-
Sept 2003	2.6	72.9	52.9	-	_

#### United States Department of Agriculture, Agricultural Marketing Service Science and Technology, Plant Variety Protection Office National Agricultural Library Building, Room 400 Beltsville, MD 20705-2351

OBJECTIVE DESCRIPTION OF VARIETY CORN (Zea mays L.)

٠,	· · · · · · · · · · · · · · · · · · ·	CORN (Zea m	ays L.)				
,	Name of Applicant(s)	cant(s) Variety Seed Source Variety Name or Temporary Designation					
3	Monsanto Technology + L.C. LLC	ogy <del>LLC</del> LLC					
1	Address (Street & No., or R.F.D. No., City, State, Zip Code and Country	FO	R OFFICIAL USE	PVPO Number			
	8350 Minnegan Road, Waterman, IL 60556	5	20060012	2/			
	Place the appropriate number that describes the varietal characters type necessary. Completeness should be striven for to establish an adequate						
COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; describe #25 and #26 in Comments section):  01=Light Green 06=Pale Yellow 11=Pink 16=Pale Purple 21=Buff 02=Medium Green 07=Yellow 12=Light Red 17=Purple 22=Tan 03=Dark Green 08=Yellow-Orange 13=Cherry Red 18=Colorless 23=Brown 04=Very Dark Green 09=Salmon 14=Red 19=White 24=Bronze 05=Green-Yellow 10=Pink-Orange 15=Red & White 20=White Capped 25=Variegated (D							
	STANDARD INBRED CHOICES (Use the most similar (in background Yellow Dent Families:	d and maturity) of these to Yellow Dent (Unrelated Co109, ND246, Oh7, T232 W117, W153R W182BN White Dent: Cl66, H105, Ky2	<b>.</b>	Sw	ut trial data): //eet Corn: C13, lowa5125, P39, pcorn: SG1533, 4722, HP30 pecorn: Mo15W, Mo16W, Mo	1, HP7211	
٠	TYPE: (describe intermediate types in Comments section)     Star				ard Inbred Name MO17		
Ĺ	2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental 7=Pipecorn 2				2 Type		
	REGION WHERE DEVELOPED IN THE U.S.A.:     1=Northwest    2=North central    3=Northeast    4=Southeast	5=South central 6=So	outhwest 7=Other	Standard Se 2 Region	ed Source		
-	MATURITY (In Region Best Adaptability; show Heat Unit formula in DAYS HEAT UNITS     8 1 1 5 2 9.5 From emergence to 50% of plants	in silk		DAYS 0 7 9	HEAT UNITS 1 6 8 0.0		
	8 0 1 5 0 1.5 From emergence to 50% of plants	in pollen		075	1 5 8 2.0	•	
	From 10% to 90% pollen shed						
	From 50% silk to optimum edible o	uality					
_	From 50% silk to harvest at 25% n	noisture					
	4. PLANT:	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	
	1 7 7. 4 cm Plant Height (to tassel tip)	30.1	30	1 9 2.7	18.6	30	
	0 5 5. 2 cm Ear Height (to base of top ear node)	11.3	30	0 7 6.8	14.0	30	
	1 3. 3 cm Length of Top Ear Internode	2.5	30	0 1 4.4	1.8	30	
	Average Number of Tillers						
	1.0 Average Number of Ears per Stalk	0.2	30	0 0 1.0	0.0	30	
	3 Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Mo	derate 4=Dark		4			
	Application Variety Data	Page 1	***************************************	Standard Inb	red Data	············	

Application Varie	ety Data	Page 2		Standard Inbro	ed Data	
5. LEAF:		Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
08,9	cm Width of Ear Node Leaf	0.9	30	0 0 9.0	0.7	30
6 2. 5	cm Length of Ear Node Leaf	6.7	30	0 6 2.4	6.4	30
5.4	Number of leaves above top ear	0.5	30	5. 6	0.4	15
3 2. 3	degrees Leaf Angle (measure from 2nd leaf above ear at anthesis	4.7 to stalk above leaf)	30	3 5.8	7.8	30
03	Leaf Color (Munsell code 5 GY 3/4)			0 2 (Munseil	code 5 GY 5/10)	
2	Leaf Sheath Pubescence (Rate on scale from	1=none to 9=like peach fuzz)		2		
5	Marginal Waves (Rate on scale from 1=none	to 9=many)		5		
6	Longitudinal Creases (Rate on scale from 1=r	none to 9=many)		8		
6. TASSEL:	M	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
0 4. 1	Number of Primary Lateral Branches	1.1	30	7. 1	1,1	30
1 4. 3	Branch Angle from Central Spike	0.7	30	3 4.6	5.2	30
3 3. 9	cm Tassel Length (from top leaf collar to tassel tip)	3.2	30	4 7.4	4.9	30
4 .8	Pollen Shed (Rate on scale from 0=male sterile	e to 9=heavy shed)		4.3		
07 /	Anther Color (Munsell code 2.5 Y 8/10)			0 5 (Munsell o	code 2.5 GY 8/6)	
16 (	Glume Color (Munsell code 5 RP 5/6)			0 2 (Munsell code 5 GY 4/8)		
1	Bar Glumes (Glume Bands): 1=Absent 2=Prese	ent		1		
a. EAR (Unhusk	red Data):		· · · · · · · · · · · · · · · · · · ·			
0.5 Silk	Color (3 days after emergence) (Munsell code:	2.5 GY 8/6)		0 5 (Munsell o	code 2.5 GY 8/6)	
0.2 Fres	sh Husk Color (25 days after 50% silking) (Muns	sell code 5 GY 4/8)		· ·	ode 5 GY 4/8)	
	Husk Color (65 days after 50% Silking) (Munsell			Ì	ode 2.5 Y 8/4)	
	tion of Ear at Dry Husk Stage: 1=Upright 2=Hori			1	,	
	Tightness (Rate on scale from 1=very loose to			8		
2 Husk	Extension (at harvest): 1=Short (ears exposed Long (>10 cm)		-10 cm beyond ear	3		
b. EAR (Husked	Ear Data):	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
1 4. 9	cm Ear Length	1.1	30	1 8.5	0.7	30
4 0. 7	mm Ear Diameter at mid-point	1.5	30	3 8.0	1.6	30
130.6 gn	n Ear Weight	17.8	30	1 0 4.8	18.0	30
18.0	Number of Kernel Rows	0.9	30	1 2.0	0.7	15
2 1	Kernel Rows: 1=Indistinct 2=Distinct			2		
1 <b>f</b>	Row Alignment: 1=Straight 2=Slightly Curved 3=	=Spiral		1		
07.7 c	m Shank Length	1.8	30	0 9.8	1.9	15
2 E	Ear Taper: 1=Slight 2=Average 3=Extreme			2		
plication Variety	Data	79/00	····	Standard Inbred	I Data	***
te: Use chart on	first page to choose color codes for color traits.	······································		I		

Application Variety Data	Page 3		Standard Inbre	d Data	
8. KERNEL (Dried):	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
1 1 .4 mm Kernel Length	0.5	30	1 1.4	0.4	15
0 7.6 mm Kernel Width	0.3	30	0 9.0	0.5	15
4 .1 mm Kernel Thickness	0.3	30	0 4.9	0.3	15
3 2. 5 % Round Kernels (Shape Grade)	4.2	500g	3 1. 7	3.6	500g
1 Aleurone Color Pattern: 1=Homozygous 2=Segrega	ating (describe)		1		
1 9 Aleurone Color (Munsell code Lighter than 5 Y 9/1)			1 9 (Munsell c	ode Lighter Than 2.5 Y 9/2	2)
0 7 Hard Endosperm Color (Munsell code 2.5 Y 8/10)			0 7 (Munsell d	ode 2.5 Y 8/10)	
3 Endosperm Type: 1=Sweet (su1) 2=Extra Sweet (s 5=Waxy Starch 6=High Protein 7=High Lysine 10=Other	sh2) 3=Normal Starch 8=Super Sweet (se)	4=High Amylose Starch 9=High Oil	03		
2 8 .6 gm Weight per 100 Kernels (unsized sample)	3.6	1400 seeds	29.7	8.7	1200 seeds
9. COB:	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
2 3 .2 mm Cob Diameter at mid-point	1.0	30	2 2.1	0.8	15
1 4 Cob Color (Munsell code 5 R 3/8)		•	1 4 (Munsell o	code 5 R 3/8)	
10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most Race or Strain Options blank if polygenic):	st resistant); leave blank	if not tested; leave			
A. Leaf Blights, Wilts, and Local Infection Diseases					
6 Anthracnose Leaf Blight (Colletotrichum graminicola) 8 Common Rust (Puccinia sorghi) Common Smut (Ustilago maydis) 7 Eyespot (Kabatiella zeae) 8 Goss's Wilt (Clavibacter michiganense spp. nebraskense) 5 Gray Leaf Spot (Cercospora zeae-maydis) 7 Helminthosporium Leaf Spot (Bipolaris zeicola)	Race 2 Race 2 Race O		5 Northern Le 3 Southern Le Southern R 3 Stewart's W	ust mut  Spot porium Leaf Spot saf Blight	Race 2 Race O
B. Systemic Diseases					
Corn Lethal Necrosis (MCMV and MDMV) Head Smut (Sphacelotheca reiliana) Maize Chlorotic Dwarf Virus (MCDV) Maize Chlorotic Mottle Virus (MCMV) Maize Dwarf Mosaic Virus (MDMV) Sorghum Downy Mildew of Corn (Peronosclerospora sorghi) Other (Specify)  C. Stalk Rots	Strain		Maize Chlor	rotic Dwarf Virus ritic Mottle Virus f Mosaic Virus owny Mildew of Corn	Strain
Anthracnose Stalk Rot (Colletotrichum graminicola) Diplodia Stalk Rot (Stenocarpella maydis) Fusarium Stalk Rot (Fusarium moniliforme) Gibberella Stalk Rot (Gibberella zeae) Other (Specify)			Anthracnose Diplodia Sta Fusarium St Gibberella St Other (Spec	ilk Rot talk Rot Stalk Rot	
D. Ear and Kernel Rots			(opoc		
Aspergillus Ear and Kernel Rot (Aspergillus flavus) Diplodia Ear Rot (Stenocarpella maydis) Fusarium Ear and Kernel Rot (Fusarium moniliforme) Gibberella Ear Rot (Gibberella zeae) Other (Specify)			Diplodia Ear	ar & Kernel Rot er Rot	
Application Variety Data			Standard Inbred	Data	
Note: Use chart on first page to choose color codes for color traits.					

Application Variety Data	Charles I Island But
11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant);	Standard Inbred Data
leave blank if not tested): Standard Deviation Sample Size	Standard Deviation Sample Size
Banks Grass Mite (Oligonychus pratensis)	Banks Grass Mite
Corn Earworm (Helicoverpa zea) Leaf-Feeding	Corn Earworm
Silk Feeding: mg larval wt Ear Damage	Leaf Feeding
Corn Leaf Aphid ( <i>Rhopalosiphum maidis</i> )	Ear Damage
Corn Sap Beetle (Carpophilus dimidiatus)	Corn Leaf Aphid Corn Sap Beetle
European Corn Borer (Ostrinia nubilalis) 1st Generation (Typically Whorl Leaf Feeding)	European Corn Borer
2nd Generation (Typically Leaf Sheath-Collar Feeding) Stalk Tunneling: cm tunneled/plant	1st Generation 2nd Generation
Fall Armyworm (Spodoptera frugiperda)	
Leaf-Feeding Silk-Feeding: mg larval wt.	Fall Armyworm Leaf Feeding
Maize Weevil (Sitophilus zeamaize)	
Northern Rootworm (Diabrotica barberi) Southern Rootworm (Diabrotica undecimpunctata)	Maize Weevil Northern Rootworm
Southwestern Corn Borer (Diatraea grandiosella)	Southern Rootworm
Leaf Feeding	Southwestern Corn Borer Leaf Feeding
Stalk Tunneling : cm tunneled/plant Two-spotted Spider Mite ( <i>Tetranychus urticae</i> )	
Western Rootworm (Diabrotica virgifera virgifera) Other (Specify)	Two-spotted Spider Mite Western Rootworm
Other Opecary/	Other (Specify)
12. AGRONOMIC TRAITS:	
5 Stay Green (at 65 days after anthesis) (Rate on a scale from 1=worst to 9=excellent.)	2 Stay Green
0 0.0 % Dropped Ears (at 65 days after anthesis)	0 0 .0 % Dropped ears
0 0 .0 % Pre-anthesis Brittle Snapping	0 0 .0 % Pre-anthesis Brittle Snapping
0 0. 0 % Pre-anthesis Root Lodging	0 0 .0 % Pre-anthesis Root Lodging
0 0. 0 % Post-anthesis Root Lodging (at 65 days after anthesis)	0 0 .0 % Post-anthesis Root Lodging
Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)	Yield
13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but not supplied; 2=data supplied)	
1 isozymes 0 RFLP's 0 RAPD'sOther (Specify)	
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Sprague, G.F., and J.W. Dudley (Editors), 1988, Corn and Corn Improvement, Third Edition, Agropomy Monograph 18, A	NSA, CSSA, SSSA, Madison, WI.
Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S., Bul. 831, 1959. U.S. Department of Agriculture, 1936, 1937, Yearbook.	
COMMENTS (e.g. state how heat units were calculated, standard inbred seed source, and/or where data was collected. C	Continue in Exhibit D):
Heat Unit Calculation: GDU = <u>Daily Max Temp (&lt;=86°F) + Daily Min Temp (&gt;=50°F)</u>	- 50°F
2	
Supplemental data obtained from 2005 seed inventory and production parent test.	

- nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- 3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY **PLANT VARIETY PROTECTION OFFICE** BELTSVILLE, MD 20705

**EXHIBIT F** 

NAME OF OWNER (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	TEMPORARY OR EXPERIMENTAL DESIGNATION		
Monsanto Technology LLC	8350 Minnegan Road Waterman, IL 60556			
	U.S.A.	VARIETY NAME 1062687		
NAME OF OWNER REPRESENTATIVE (S) Timothy R. Kain	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	FOR OFFICIAL USE CAPY		
	8350 Minnegan Road Waterman, IL 60556	PVPO NUMBER		
	U.S.A.	200600121		

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.